



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,583	06/13/2006	Holger Behrens	HM-692PCT	3257
40570	7590	04/16/2008		
FRIEDRICH KUEFFNER			EXAMINER	
317 MADISON AVENUE, SUITE 910			LAMB, BRENDA A	
NEW YORK, NY 10017				
			ART UNIT	PAPER NUMBER
			1792	
			MAIL DATE	DELIVERY MODE
			04/16/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/563,583

**Applicant(s)**

BEHRENS ET AL.

**Examiner**

Brenda A. Lamb

**Art Unit**

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2 and 11-13 is/are rejected.  
7) ☒ Claim(s) 3-10 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 9/4/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Art Unit: 1792

The disclosure is objected to because of the following informalities: The specification fails to describe under description of the drawings newly submitted Figure 4.

Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Japan 11-193451.

Japan '451 teaches as shown in Figure 1 that the design of a device for hot dip coating a metal strip which is comprised of the following elements: a coating tank that contains the molten coating metal and a guide channel wherein the guide channel is arranged upstream, relative to the direction of travel of a metal strand, of the coating tank such that the strand is passed vertically through the guide channel and then through the coating tank, and wherein the guide channel is comprised of at least two inductors (17a, 17b) for inducing an electromagnetic field, which are installed on both sides of the metal strand in the area of the guide channel in order to keep the coating metal in the coating tank, wherein the distance (d) between the walls that bound the guide channel is not constant in the direction (N) normal to the surface of the metal strand in the region (H) of the vertical extent of the guide channel between the lower end of the guide channel and the bottom of the coating tank, such that the walls that bound the guide channel have a constriction or an expansion. Japan '451 teaches every structural element of the claimed apparatus as set forth in claim 1.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 11-193451.

Japan '451 is applied for the reason noted above. Japan '451 fails to teach the cross section of the expansion has a circular segment. However, if one desires to coat a substrate having a circular cross section, it would have been prima facie obvious to

optimize the cross section of the expansion of Japan '451 such that it has a circular segment since Japan '451 show in his figures that the cross-section of the guide channel and entrance opening matches the substrate being coated.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 11-193451 in view of Huxley 928,385.

Japan '451 is applied for reasons noted above but fails to teach the device includes a bath relaxation plate is arranged in the coating tank (3) near the surface of the coating metal. However, it would have been obvious to modify the Japan '451 apparatus to provide plate consisting of a ceramic material near the surface of the molten metal bath since Huxley teaches doing so for the taught advantage of protecting the bath from contaminating influences.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 11-193451 in view of Japan 55-104466.

Japan '451 is applied for reasons noted above but fails to teach the device includes a bath relaxation plate is arranged in the coating tank (3) near the surface of the coating metal. However, it would have been obvious to modify the Japan '451 apparatus to provide vertical adjustable plate near the surface of the bath since Japan '466 teaches doing so for the obvious advantage of protecting the bath from contaminating influences.

Applicant's arguments filed 9/4/2007 have been fully considered but they are not persuasive.

Applicant's argument that Japan '451 fails to teach a flow deflection element arranged in the guide channel is found to be non-persuasive since claim 1 is silent as a flow deflection element arranged in the guide channel rather claim 3 which the examiner has objected to has claimed a flow deflection element arranged in the guide channel. The examiner has indicated below that claims 3-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday. The examiner can also be reached on alternate Wednesdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brenda A Lamb  
Primary Examiner  
Art Unit 1792

/Brenda A Lamb/

Primary Examiner, Art Unit 1792